

$$y = \cos x + \frac{2}{x^3}$$

$$\frac{dy}{dx} = \frac{d(osx)}{dx} + 2\frac{dx^3}{dx}$$

$$\int_{-\infty}^{\infty} = -\sin x + 2(-3x)$$

$$= -\sin x - 6x$$

(2) 
$$y = 2nx(1-n^2)$$

11/10

$$\frac{dy}{dx} = \frac{2\pi}{2} \times \frac{(1-x^2)}{(1-x^2)}$$

$$y = \frac{2\pi}{2} \times \frac{(1-x^2)}{(1-x^2)}$$

$$= \frac{2\pi}{2} \times \frac{(1-x^2)}{(1-x^2)}$$

$$y = (\pi + \pi)^{2}$$

$$2^{+} + \sin^{2} \pi + \cos^{2} \pi$$

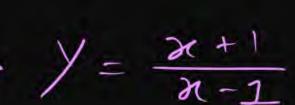
$$y = (\sqrt{n} + \sqrt{n})^{2}$$

$$= x + 2y + 2y + \sqrt{n} + \sqrt{n}$$

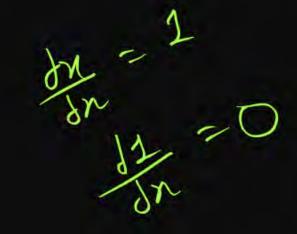
$$y = x + 2 + \sqrt{n}$$

## Question

$$y = \frac{x+1}{x-1} = \frac{x}{x}$$



$$\frac{1}{100} \frac{dy}{dx} = \frac{(x-1)}{100} \frac{d(x+1)}{dx} - \frac{(x+1)}{100} \frac{d(x-1)}{100} \frac{d(x-1)}{100$$



$$(n-1) \times 1 - (n+1) + 1$$

$$(n-1)^{2}$$

$$= \frac{n-1-n-1}{(n-1)^{2}} = \frac{2}{(n-1)^{2}}$$

χ.

## Question



$$y = x^2 - 4x + 3$$
, then find value of  $\frac{dy}{dx}$  at  $x = 2$ 

$$y=\chi^2-4\alpha+3$$

$$\frac{dy}{dn} = 2x - 4(1) + 0$$

$$\frac{dx}{dx} = 2x - 4$$

$$\frac{dy}{dx} = 2x - 4$$

$$\frac{dy}{dn} = 2x^2 - 4 = 0$$

## Question

Note are a

®

$$y = \frac{A}{x^6} - \frac{B}{x^5}; \text{ then find } x \text{ where}$$

$$re\frac{dy}{dx} = 0$$

$$\gamma = \frac{A}{\chi^6} - \frac{B}{\chi^5}$$

$$\frac{dy}{dx} = A \frac{dx^6}{dx} - B \frac{dx^5}{dx}$$

$$\frac{dy}{dx} = -6Ax^{-7} + 58x^{-6}$$

$$-\frac{6A}{N^{7}} + \frac{5B}{N^{6}} = 0$$

$$\frac{5B}{\mathcal{H}^{5}} = \frac{6A}{\mathcal{H}^{7}}$$

Position of object 
$$x = 4t^2 + 2(t^2) - 7t + 9$$
 then find  $y = 4t^3 + 2n^2 - 7a + 9$ 

$$y = 4x^3 + 2n^2 - 7a + 9$$

$$y = 4x^3 + 2n^2 - 7a + 9$$

$$y = 4x^3 + 2n^2 - 7a + 9$$

$$y = 12t^2 + 4t - 7$$

$$y = 12(t^2 + 4t - 7)$$

$$y = 12(t^2 + 4t$$

(10) 
$$y = cosn find (ty) at n = 7/6$$

$$\frac{dy}{dn} = -\sin x \implies \left(\frac{dy}{dn}\right) = -\frac{1}{2}$$

(1) 
$$y = \frac{(y)}{(x^2-y)}$$
  $\Rightarrow$  division (Rule)  $\frac{dy}{dx} = \frac{(x^2-y)}{4x} \frac{dy}{dx} - \frac{y}{4x} \frac{d(x-y)}{dx}$ 

$$\frac{12}{\sqrt{2x^{-0}}} = \frac{-8x}{(x^{2}-y)^{2}} = \frac{-8x}{(x^{2}-y)^{2}} = \frac{-8x}{(x^{2}-y)^{2}}$$

$$\frac{12}{\sqrt{2x^{-0}}} = \frac{-8x}{(x^{2}-y)^{2}}$$

$$= e^{\chi} \log \chi + \frac{e^{\chi}}{\chi}$$

R



9f electrostedic force

Blu charse is f

and distr is or then

f deoper orword

## THAK YOU

